at least one fluorescent-light detector arranged on a bottom side of the specimen, said bottom side facing away from said light source, said fluorescent detector detecting fluorescent light generated by said specimen; and,

at least one transmitted light detector for detecting light transmitted through the specimen; said fluorescent and said transmitted detectors simultaneously detecting fluorescent and transmitted light.

Claim 3 (Amended)

The microscope assemblage as defined in Claim 1, characterized in that at least one transmitted-light detector (16) is arranged on the side of the specimen (6) facing away from the light source (1).

Claim 11 (Amended)

The microscope assemblage as defined in Claim 1, characterized in that a scanning device (4) is arranged on the side of the specimen (6) facing toward the light source (1).

Claim 29 (Amended)

A microscope assemblage for confocal scanning microscopy comprising:

a light source (1) for illuminating a specimen (6);

at least one fluorescent-light detector (11, 14) for the detection of fluorescent light (10, 13) generated in the specimen (6), wherein the specimen (6) defines a top side (6a) facing the light source (1) and a bottom side (6b) facing away from the light source (1);

at least one transmitted-light detector (16) for the detection of transmitted light (15) passing through the specimen (6); and,

an additional light source (21) operatively arranged on the side of the specimen (6) facing away from the light source (1) and arranged for illuminating said specimen.

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Claim 31 (Amended)

The microscope assemblage as defined in Claim 29, characterized in that an optical system is a member selected from the group consisting of a sector optical system, a sector polarization optical system, a sector stop, a sector phase stop and a sector phase filter, said optical system associated with said additional light source.

Claim 32 (Amended)

The microscope assemblage as defined in Claim 31, characterized in that the optical system is arranged in a Fourier plane before the additional light source (21).

Claim 42 (Amended)

The microscope assemblage as defined in Claim 29, characterized in that at least one detector (17) is arranged on the side of the specimen (6) facing toward the light source (1), on the side of the scanning device (4) facing away from the specimen (6).

In the Specification

The Examiner objected to the Summary of the Invention and indicated that it contained numerous details of the inventive device. Applicant submits the enclosed Substitute Specification, which adds paragraph numbers, removes objectionable language from the Summary of the Invention and places the objectionable language in the Detailed Description. The Substitute Specification also adds a brief discussion with regard to new Figures 5 and 6, which discussion adds no new matter. A marked up version of the original specification is submitted herewith.

In the Drawings

Applicant respectfully submits new Figure 5, which figure illustrates both the additional light source (21) and the transmitted light detector (16) on the side of the specimen facing away from the light source (1). Applicant asserts that no new matter is being added as such feature is disclosed in Claims 29 and 33 and paragraph [0045] of the Substitute Specification.

Applicant also respectfully submits new Figure 6, which figure illustrates a single light detector 23 capable of detecting both transmitted and fluorescent light in a single detector. Applicant